ART. XX.—Description of a New Species of Sminthopsis.

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I am indebted to Mr. G. A. Keartland for the specimen upon which the following description is based. Though there is only one, it is an adult male, and differs so clearly from all known species of Sminthopsis that I have no hesitation in describing it as new.

Sminthopsis longicaudatus, sp. n.

Size of body similar to that of *S. leucopus*. A darkish line along each side of the face through the eye. Upper and lower lips and chin white. General body colour grey with rufous tinge in parts; the basal three-quarters of each hair blue-black. Forearm, hand and foot white.¹

Ear large and broad; laid forward they reach the anterior canthus of the eyes.

Hand with six pads, four smaller distal ones corresponding in position with the intervals between the digits 1 and 2, 2 and 3, 3 and 4, 4 and 5. Two large proximal ones near the wrist. Both of the latter are V-shaped, with the apex pointing forwards. The one on the outer side is large. All the pads are striated.

Foot with five pads, three at the base of the digits, one at the base of the hallux, and one further back. All the pads are striated. Both palms and soles are finely granulated.

Tail remarkably long—twice the length of the head and body; scaly, with short stiff hairs; no crest; composed of some 30 elongate vertebral bodies.

Skull.—Slender and delicate. The nasals proportionately longer than in any other species, and but very slightly broader behind than in front. Interorbital space smooth; no postorbital

¹ Owing to the imperfect preservation of the fur it is not possible to describe the colours more in detail.

process. Lambdoidal crest not strongly developed. Anterior palatine foramen extending back slightly beyond the level of the hinder edge of the canine. Posterior palate with large regular-shaped vacuities, each as long as the first three molars, and a second pair at the hinder end of the palate extending backwards beyond the hinder edge of the last molar. Bullae of considerable size, the mastoid as well as the alisphenoid part being distinctly swollen.

Upper incisors small, the first cylindrical, i² i³ and i⁴ distinctly flattened; i⁴ slightly the largest. Upper canine comparatively small, flattened, not projecting beyond the limit of the last p.m., with a small anterior and distinct posterior cusp. Upper p.ms. increasing regularly in size from before backwards; p⁴ not twice the size of p¹. Lower incisors small, but the first one decidedly larger than the other two. Canines with slight but distinct posterior basal cusp. Three p.ms. evenly increasing in size backwards.

Body Measurements.

| Length, head and body | 100 |
|---------------------------------|-----|
| Tail | 202 |
| Hind foot | 18 |
| Forearm and hand | 28 |
| Ear | 15 |
| Head | 35 |
| Muzzle to eye | 14 |
| Lower leg | 27 |
| Heel to front of large sole pad | 15 |

Skull Measurements.

| Basal length | 27 |
|-------------------------|------|
| Greatest width | 17 |
| Nasal, length | 12 |
| Nasal, greatest breadth | -2.3 |
| Nasal, least breadth | 1.9 |
| Intertemporal breadth | 6 |
| Palate, length | 16 |

| Palate, breadth between outer corners | |
|---------------------------------------|-----|
| of m ³ | 9 |
| Palatal foramina | 3.5 |
| Basi-cranial axis | 9 |
| Basi-facial axis | 18 |
| Facial index | 200 |
| Teeth, vertical height upper canine | 1.5 |
| " horizontal length p ⁴ | 1.5 |
| ,, length, ms ¹⁻³ | 5 |
| ,, breadth, m ⁴ | 2 |

Habitat. West Australia.

Type in National Museum, Melbourne.

In general form of body this species is a typical Sminthopsis, calling to mind S. leucopus. It differs from a small Phascologale in the general lightness of its build and the length of snout and feet, and from all known species of Sminthopsis in the extraordinary length of its tail, which is longer in proportion than in Antechinomys, from which, again, it differs in the relative length of the hind limbs.